Applicants: Swarn S. Kalsi, et al. Attorney's Docket No.: 05770-170001

Client Ref. No.: AMSC-546

Serial No.: 10/083,927

Filed: February 27, 2002

Page : 6 of 8

## **REMARKS**

Applicants wish to thank the Examiner for considering the Applicants' arguments during the January 19, 2005, interview.

Applicants acknowledge Examiner's withdrawal, indicated in the November 17, 2004 Office Action, of the rejection of claims 1 and 30 over Beerman and the rejection of claims 1, 5, 30 and 33 over U.S. Patent No. 5,053,663 to Boer.

The Examiner rejected independent claim 1 as anticipated by U.S. Patent No. 4,356,419 to Boer.

Applicants amended claim 1 to add the inherent feature that substantially the entire stator coil support structure is constructed of non-magnetic, thermally conductive material. By constructing substantially the entire stator support structure using a non-magnetic, thermally conductive material, as provided in claim 1, stator heating resulting from the presence of eddy currents is eliminated, and heat generated by stator coil assemblies can easily be removed.

In contrast, in Boer's apparatus, only the <u>tooth-shaped</u> segments are constructed from non-magnetic materials. As Boer explains, "[t]he segment portion 201 [in FIG. 2] <u>without teeth</u> is formed of <u>magnetic material</u> such as high silicon steel, while the tooth-shaped segment parts 202 are formed of non-magnetic material" [col. 3, lines 27-30, emphasis added]. So only part of the mounting body of the Boer's apparatus is constructed from a non-magnetic material, and thus it is not substantially the <u>entire</u> mounting body of the Boer's apparatus that is constructed from a non-magnetic material.

Accordingly, Applicants consider independent claim 1 to be patentable over Boer. Claims 2-8, which depend from independent claim 1, are patentable over Boer for at least the same reasons that independent claim 1 is patentable.

The Examiner also rejected claim 30 as anticipated by Boer (U.S. Patent No. 4,356,419). Applicants amended claim 30 to add the feature that the stator assembly includes a stator coil support structure, which itself includes a ring section and the heat sinking members that are positioned radially about the ring section. Amended claim 30 also clarifies that the stator coil support structure is surrounded by the annular assembly and that the <u>ring section</u> is constructed from non-magnetic, thermally conductive material. Support for the aforementioned features may be found, for example, in FIG. 11 and page 17's line 1 to page 18's line 27 of the application.

Attorney's Docket No.: 05770-170001 Applicants: Swarn S. Kalsi, et al.

Client Ref. No.: AMSC-546

Serial No.: 10/083,927

: February 27, 2002 Filed

Page : 7 of 8

Accordingly, since in Boer only the tooth-shaped section is constructed of non-magnetic material, whereas claim 30 requires the ring section and the heat sink members to be constructed from non-magnetic, thermally conductive material, Applicants consider independent claim 30 to be patentable over Boer. For at least the same reasons as those provided with respect to independent claim 30, Applicants also consider claims 31-36, which depend from claim 30, to be patentable over Boer.

The Examiner also rejected independent claim 9 as being unpatentable under 35 U.S.C. §103(a) over Boer in view of U.S. Patent No. 4,123,676 to Cooper.

As recited in Applicants' independent claim 9, Applicants' substantially the entire stator coil support structure is constructed of a non-magnetic, thermally-conductive material. In contrast, as explained above, in Boer's mounting structure only the tooth-shaped section of the mounting structure is made of non-magnetic material, while the segment portion without teeth is constructed of a magnetic material. As for Cooper, while Cooper describes a superconducting rotor, it does not describe stator assemblies of any kind, let alone a stator coil support structure as recited in Applicants' claim 9, but instead observes that "[t]he construction of the stator member may be of any suitable type and has not been shown in detail as it is not a part of the present invention" [col. 2, line 67 to col. 3, line 1, emphasis added]. So neither Boer nor Cooper describe a stator coil support structure where "substantially the entire stator coil support structure constructed of a non-magnetic, thermally-conductive material", as Applicants' independent claim 9 requires.

Applicants, therefore, consider independent claim 9 to be patentable over the prior art cited by the Examiner. Applicants also consider claims 10-19, which depend from independent claim 9, to be patentable over the prior art cited by the Examiner for at least the same reasons provided with respect to independent claim 9.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not been exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this

Applicants: Swarn S. Kalsi, et al.

Serial No.: 10/083,927

Filed: February 27, 2002

Page : 8 of 8

paper, and the amendment of any claim does not necessarily signify concession of patentability of the claim prior to its amendment.

In view of the foregoing amendments and remarks, Applicants respectfully submits that the application is in condition for allowance and such action is respectfully requested at the Examiner's earliest convenience.

Applicants' undersigned attorney can be reached at the address seen below. All telephone calls should be directed to the undersigned at (617) 368-2105.

Enclosed please find a Petition for Three Month Extension of Time, with the required fee of \$1020. Please apply any other fees due in this case to deposit account 06-1050, referencing attorney docket 05770-170001.

Date:

Ido Rabinovitch\* for

Attorney's Docket No.: 05770-170001

eliporte

Client Ref. No.: AMSC-546

Frank R. Occhiuti Reg. No. 35,306

PTO Customer No. 26161 Fish & Richardson P.C. 225 Franklin St. Boston, MA 02110

Telephone: (617) 542-5070

Facsimile: (617) 542-8906

\* See attached document certifying that Ido Rabinovitch has limited recognition to practice before the U.S. Patent and Trademark Office under 37 CFR § 10.9(b).

20981383.doc